

Is it only about only? A Study on Focus Particle Placement Acceptability in L2 English Learners and English Monolinguals

Michaela Mae Vann
Università Ca' Foscari Venezia, Italia

Abstract The placement of adverbs has been widely studied over the last few decades, both in first (L1) and second language (L2) acquisition. While traditional grammars teach that the preferred order in English is (S)ubject, (A)dverb, and (V)erb, adverbs which introduce focus receive less attention. Focus particles take scope over the constituents they precede, making their placement and interpretation in a sentence variable. In this study I investigate the acceptability of Focus particle (only, even, also) placement when used as adverbs in 96 participants: 48 Italian L2 English learners and 48 English monolinguals.

Keywords Second Language Acquisition. Adverbs. Focus particles. Foreign Language Learning.

Summary 1 Introduction. – 2 The Present Study. – 2.1 Participants. – 2.2 Design and Materials. – 2.3 Procedure. – 2.4 Scoring and Data Analyses. – 2.5 Results. – 3 Discussion and Conclusion.



Peer review

Submitted 2021-08-04
Accepted 2021-11-10
Published 2022-04-12

Open access

© 2022 | Creative Commons Attribution 4.0 International Public License



Citation Vann, M.M. (2022). "Is it only about only? A Study on Focus Particle Placement Acceptability in L2 English Learners and English Monolinguals". *Annali di Ca' Foscari. Serie occidentale*, 56, [43-62].

1 Introduction

Why are certain aspects of a foreign language difficult to acquire? One goal of second language acquisition is to investigate why some errors are more common than others, and why some are more persistent even at higher levels of proficiency. In second language acquisition (SLA), errors can be the product of overgeneralisation of learned grammar rules, interference of a speaker's first language (L1), a lack of knowledge of the second language (L2), or issues in execution during language production.

Specific properties of a language can be difficult to acquire past the critical period of language acquisition (Chomsky 1986; see Stringer 2013 for adult SLA) and interference may occur when certain properties of a specific language are absent in either the L1 or the L2. Determining the cause of non-target grammatical representations is fundamental in understanding learning trajectories and can greatly inform L2 language acquisition.

One theory argues that an L2 learner's grammar begins where the L1 grammar ends, which then allows for transfer of certain parameters of the L1 to the L2. This is known as the Full Access/Full Transfer Theory (Schwarz, Sprouse 1996) and is part of the interlanguage stage that L2 language learners transition through as they become more competent language users. As L2 language users become more competent, they are guided by a failure-driven process that guides the readjustment of the L2 parameters (Schwartz, Sprouse 1994; Formisano 2013). This process can account for word order errors when L2 learners are in the process of acquiring a new language.

Focus Adverbs (FAs) in English, like all categories of adverbs, have the strict word order of SAV when used as an adverbial (i.e., modifying the verb phrase (VP)), as they share certain characteristics in terms of their behavior and positioning in the sentence (König 1991). This deviates from Italian, which allows for two possibilities of placement, either pre-verbally or post-verbally. However, there can be exceptions for both Italian and English considering that adverb position depends on a complex combination of semantic, syntactic, and prosodic information.

For the L2 learner, interpreting the meaning of an adverb may be difficult, especially with FAs. A speaker can express different ideas using one structure if prosody is implemented correctly. However, in other languages such as Italian, the position of adverbs, including FAs, can entirely change the semantics of the sentence. Word order variation in Italian allows for speakers to shift focus from an event, i.e., the verb, to the object, by moving the element that introduces focus. Interestingly, in English, as FAs modify a VP, they take scope over the entire event and object, and therefore can be interpreted two ways (König 1991). This is outlined below in (1a) and (1b):

- (1) John only bought the flowers.
- a. John only [bought the flowers_F] – he did not do anything else.
 - b. John only bought the [flowers_F] – he did not buy anything else.

In (1) *only* scopes over both the VP and the object in the surface form. The two explanations of the example in (1) demonstrate the differences in interpretation that can arise from prosody. In (1a) we find the FA associates with the event, therefore no other events can have occurred, while in (1b) we see the interpretation in which the FA associates with the object, implying no other objects were involved during the event (Rooth 1992; for a review of the semantics of *only* see Alxatib 2020).

This subtle but important difference in the variability of adverb association makes it more difficult for L2 speakers of English to learn than other word categories such as nouns, verbs, and adjectives (Firsten, Killian 1994; Solís Hernández 2006). White (1991) proposes that core grammatical elements and their parameters are so embedded in the speaker's syntactic system that the probability of them interfering with the L2 grammar is very high.

One explanation for the difficulties that may arise from the similarities and differences between English and Italian is *the verb-raising parameter* (Emonds 1978, 1985; Chomsky 1989; Pollock 1989). It accounts for a number of differences in many languages, including adverb placement. In Italian it requires all finite verbs to raise to Inflection (I), however, this does not happen in English, which the exception of *be* and *have*.

In an experimental study using an acceptability judgment task, Solís Hernández (2006) found that both L2 English students and instructors failed to identify sentences with incorrect adverb placement, especially in more syntactically complex sentences with the auxiliary *be*. In another study investigating adverb placement, Formisano (2013) investigated adolescents in Italy, replicating White's (1991; 1989a; 1989b) findings that explicit and form-focus teaching strategies are overall more effective than traditional descriptive forms. Formisano (2013) successfully used the teaching of syntactic verb movement from a crosslinguistic perspective with the goal of resetting the parameters of adverb placement.

The aims of this study were twofold. The first aim was to provide evidence for a word order preference for Focus Adverbs (FAs) in native speakers of English, which was assumed to be (S)ubject, (A)dverb and (V)erb. The second aim was to investigate the acceptability of these same sentences featuring FAs in a homogenous group of English language learners to shed light on word order preferences and better understand what factors may drive them.

2 The Present Study

An acceptability judgment task was designed to investigate the nature of the placement of FAs first in native speakers of English and subsequently in a homogenous group of Italian L2 learners of English. The goal of these two experiments was to examine the grammaticality of a complex subcategory of adverbs, FAs, in these two groups of English users. In Experiment 1, native speakers of English were asked to judge sentences to verify that the word order preference was indeed SAV. In Experiment 2, highly proficient L2 English learners were recruited to participate to compare the results with those of Experiment 1. More specifically, it was designed to be able to examine whether advanced and highly proficient English learners differed in their mastery of the understanding of Focus Adverb placement when compared to native speakers. It was assumed that native speakers of English have a strict grammatical word order for adverbs and therefore would not accept SVA structures when confronted with grammaticality judgement tasks, while Italian English L2 learners would struggle with identifying ungrammatical FA placement, accepting both SAV and SVA as grammatical.

2.1 Participants

There was a total of 96 participants. 48 monolingual English speakers and 48 Italian learners of English were recruited via different social media platforms and took part in Experiment 1 and 2, respectively. The English monolinguals had all grown up in the US and had never lived outside of the country for a significant amount of time, nor did any of them speak another language fluently. 20 of the monolingual English speakers had not obtained a college degree, while the other 28 had at least a bachelor's degree or higher. The Italian participants attested to having at least a B2 or higher level of English according to the CEFR (Council of Europe 2001), however, the majority of Italian participants had a B2 or C1 level of English. Most of the Italian participants had a college degree ($N = 38$), while few did not ($N = 10$).

Participation in the study was completely voluntary and the participants were informed that they would not be compensated in any form and could leave the survey at any time. The participants were all between the ages of 18 and 35 and were nearly 50% female and 50% male.

2.2 Design and Materials

The design of the grammaticality judgment task included 24 experimental items investigating the acceptability of FAs either pre- or post-verbally. The design was a 2×3 design that manipulated adverb type (only, even, also) and placement (pre-verbal or post-verbal). There were 48 filler sentences, for a total of 72 total sentences that participants were asked to rate using a Likert scale from 1 (unacceptable) to 5 (completely acceptable). Because we wanted to facilitate more natural judgments from participants without having them overthink the sentences, the questionnaire's scale was labelled "no one would say this" for 1 and "this is perfect" for 5. The numbers in between were left blank, allowing more freedom for participants to give judgments without much external pressure.

There were 6 conditions for each item, therefore participants saw a total of 24 experimental sentences which varied the 3 different FAs and the word order positions. The goal was to create experimental items that highlighted the true adverbial form and interpretation of the Focus Particles. Surprisingly, in a few sentences it was found to be considered otherwise, which will be discussed in the results.

Both Experiment 1 and 2 consisted of a grammaticality judgement task administered through Google Forms. Participants were first asked to give their consent by filling in a form on Google Forms prior to beginning the experiment. Participants were not told that the experiment was investigating adverb placement, however they were aware of the fact they were giving acceptability judgements for certain linguistic elements. They were confronted with 72 sentences and asked to give each one a single rating. The sentences included different types of adverbs, Focus Adverbs: *only*, *even* and *also*, and a number of frequency and manner adverbs in the two different word orders of SAV and SVA.

There was a total of 6 experimental lists, which were randomised and then reversed to create a total of 12 lists. This was done to verify that the lists were fully counterbalanced and ensured that only eight participants saw each list. The 12 experimental lists were then assigned to the participants, each containing 24 experimental items, based on 6 conditions, as listed below.

24 experimental questions:

- 4 with only, SAV word order
Example: She only found a book.
- 4 with only, SVA word order
Example: Sarah asked only a question.
- 4 with even, SAV word order
Example: He even knew Mary.

- 4 with even, SVA word order
Example: She played even soccer.
- 4 with also, SAV word order
Example: Sofia also needed a pen.
- 4 with also, SVA word order
Example: Robert painted also some pictures.
- 24 adverbs of frequency filler questions:
 - 12 with SAV word order
Example: He often found a solution.
 - 12 with SVA word order
Example: She asked seldom a question.
- 24 adverbs of manner filler questions:
 - 12 with SAV word order
Example: She calmly found a seat.
 - 12 with SVA word order
Example: Mark asked anxiously a question.

Each participant was assigned to one of the 12 lists, for a total of 4 people per questionnaire. Each experimental item occurred in one of the six conditions across the experimental lists to elicit a grammatical/ungrammatical judgement from the participants. The same verbs were used in each subcategory of the list; therefore, each verb was used 3 times during the experiment, however with different types of adverbs and different word orders. The verbs were taken from an English textbook to ensure that they were, indeed, among the most frequent verbs used in the language for English language learners. This was done to ensure the participants in Experiment 2 would know the verbs.¹ To balance the sentences as well as to see if there were any effects determiners could have on the placement of Focus Adverbs, the verbs were organised as follows: each verb was paired with a proper noun, no article, some + plural noun, definite article + singular noun, definite article + plural noun, an indefinite article. This organisation was carried into the filler questions as well, therefore the same verbs are used with the same determiners throughout the test.

All sentences were presented in the past simple tense for ease of construction of logical sentences and consistent word order. The experimental items were pseudo-randomised to ensure that no more than two consecutive experimental sentences shared any of the variables under investigation.

¹ The verbs used were: *set, feel, bring, lose, find, ask, need, have, know, see, ignore, invite, play, talk, eat, tutor, paint, keep, want, take, help, write, like, need.*

2.3 Procedure

Using Google Forms, participants consented to participate in the study and were then electronically presented with sentences and were asked to rate them on a Likert scale ranging from 1 to 5. Once this phase was finished, they were asked to fill out a short questionnaire that asked them biographical questions. The entire task took about 10 minutes to complete.

2.4 Scoring and Data Analyses

The data were downloaded from Google Forms using Excel spreadsheets and was then coded for the purposes of conducting linear mixed model analyses in R. Responses were coded accordingly: a rating of a 4 or higher was considered grammatical and was therefore binarised as '1', whereas responses of a 3 or lower were considered 'unsure' or 'ungrammatical' and binarised as '0' for the analyses.

2.5 Results

Overall, all participants provided responses to all items for a total of 6,912 responses. Of the 2,304 experimental items, participants judged 899 as ungrammatical and 1,405 as grammatical. Table 1 shows the breakdown of these responses by adverb type, order, and speaker type.

Table 1 Numbers and proportions of Grammatical and Ungrammatical Ratings over each experimental condition for both Monolinguals and English L2 Learners

Monolinguals		
Condition (Adverb and Word Order)	Grammatical	Ungrammatical
Also SAV	141 (73%)	51 (27%)
Even SAV	127 (66%)	65 (34%)
Only SAV	135 (70%)	57 (30%)
Also SVA	60 (31%)	132 (69%)
Even SVA	65 (34%)	127 (66%)
Only SVA	124 (65%)	68 (35%)
English L2 Learners		
Condition (Adverb and Word Order)	Grammatical	Ungrammatical
Also SAV	143 (74%)	49 (26%)
Even SAV	128 (67%)	64 (33%)
Only SAV	130 (68%)	62 (32%)
Also SVA	117 (61%)	75 (39%)
Even SVA	103 (54%)	89 (46%)
Only SVA	132 (69%)	60 (31%)

Note: each condition had a total of 192 responses per experiment.

These proportions are better outlined in Figure 1 for the English monolinguals and Figure 2 for the English L2 learners. Figures 1 and 2 plot the proportion of acceptable ratings for Monolinguals and L2 English learners, respectively. Figure 1 shows that English monolinguals clearly prefer the SAV order, except in the case of the FA *only*.

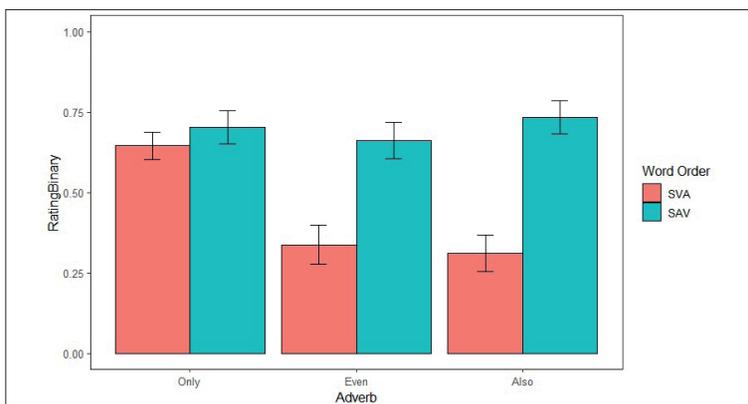


Figure 1 English Monolinguals' Proportions of Acceptable Ratings for word order condition and adverb type

Figure 2 shows the proportions of acceptable rating in L2 English learners, who, on average, show no clear word order preference.

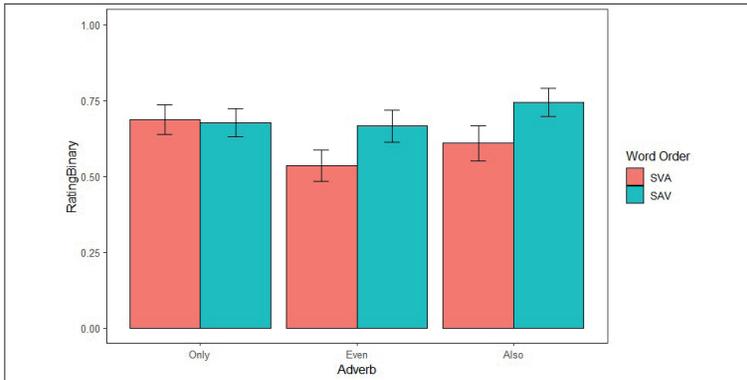


Figure 2 Italian L2 English learners' Proportions of Acceptable Ratings for word order condition and adverb type

We examined the effects of word order and adverb for each group and then compared the two groups by analysing them together. All three sets of analyses fitted the data with binomial mixed logit models using the lme4 package in R² which predicts the logit-transformed likelihood of rating (log odds for grammatical rating). All analyses used the maximal random effects structure appropriate for our experimental design (Barr et al. 2013), however, that model did not converge. The final model included random intercepts for participants and items and random slopes for order for participants and items for all three sets of analyses. We performed stepwise forward model comparisons using likelihood-ratio tests (ANOVA function in R) to determine the significance of our fixed effects. Tables 2, 3, and 4 show the stepwise forward model comparisons for each of the analyses.

Table 2 Stepwise forward model comparisons for fixed effects for Monolinguals

Fixed Effect Term	AIC (Δ AIC)	df (Δ df)	χ^2	$p =$
Base model: Random intercepts for participant and item + random slope for Order within participants and items	1166.4 (-)	7 (-)	-	-
+ Order	1158.8 (-7.51)	8 (1)	9.51	<0.001
+ Adverb	1112.3 (-46.55)	10 (2)	50.55	<0.000
+ Order x Adverb	1075.0 (-37.48)	12 (2)	41.33	<0.000

2 lme4: Mixed-effects modeling with R. <http://lme4.r-forge.r-project.org/book/>.

Table 3 Stepwise forward model comparisons for fixed effects for Italians

Fixed Effect Term	AIC (Δ AIC)	df (Δ df)	χ^2	p=
Base model: Random intercepts for participant and item + random slope for Order within participants and items	1288.4 (-)	7 (-)	-	-
+ Order	1289.2 (0.81)	8 (1)	1.19	n.s.
+ Adverb	1283.4 (-5.79)	10 (2)	9.79	<0.01
+ Order x Adverb	1278.7 (-4.71)	12 (2)	8.71	<0.05

Table 4 Stepwise forward model comparisons for fixed effects for both groups

Fixed Effect Term	AIC (Δ AIC)	df (Δ df)	χ^2	p=
Base model: Random intercepts for participant and item + random slope for Order within participants and items	2454.7 (-)	7 (-)	-	-
+ Order	2449.3 (-5.30)	8 (1)	7.29	<0.01
+ Group	2449.2 (-0.17)	9 (1)	2.18	n.s.
+ Order * Group	2448.2 (-37.48)	10 (1)	2.97	=.08
+ Adverb	2411.4 (-36.75)	12 (2)	40.75	<0.000
+ Adverb * Order	2371.8 (-39.62)	14 (2)	43.62	<0.000
+ Adverb * Group	2362.4 (-9.39)	16 (2)	13.39	<0.001
Order * Adverb * Group	2357.4 (-5.05)	18 (2)	9.05	<0.05

Experiment 1: Monolingual Analyses

The best fit model for the analysis is shown in Table 5. As predicted, Experiment 1 shows significant main effects for a preference towards the SAV word order, indicating that, on average, English monolinguals rated the SAV word order items with FAs as more grammatical than with the SVA word order (70%, STDEV = 0.31, ci = 0.09 vs. 43%, STDEV = 0.32, ci = 0.09). Planned pairwise comparisons revealed that overall, there was no effect for the comparison of adverbs *also* and *even* ($\beta = 0.18$ (SE 0.22), $z = 0.82$ $p = 0.70$), however, there was an effect when comparing *only* to *also* ($\beta = -1.10$ (SE = 0.23), $z = -4.88$ $p = <.0001$) and *only* to *even* ($\beta = -1.27$ (SE = 0.22), $z = -5.89$, $p = <.0001$). This pattern was similar in the simple interaction of order x adverb. The interaction between order and adverb (*also* + *even* vs. *only*) was the only significant interaction in the model.

Table 5 Best fit model for Experiment 1 for Monolinguals (log odds)

Fixed Effects	Estimate	SE	z value	95% CI	p-value
Intercept	0.59	0.17	3.43	0.25 to 0.93	<0.001
Order	0.87	0.31	2.77	0.25 to 1.48	< 0.001
Adverb Comparison 1 - Also vs. Even	-0.09	0.11	-0.82	-0.30 to 0.12	n.s.
Adverb Comparison 2 - Also + Even vs. Only	0.40	0.06	6.19	0.27 to 0.52	<0.001
Order × Adverb Comp. 1 (Also vs. Even)	-0.21	0.11	-1.92	-0.43 to -0.005	=0.06
Order × Adverb Comp. 2 (Also + Even vs. Only)	-0.38	0.06	-6.02	-0.51 to -0.26	<0.001

Experiment 2: Italian L2 English Learner Analyses

The best fit model for the analysis [tab. 6] revealed that there were no main effects for order or adverb type for the Italian English L2 learners. English L2 learners rated the SAV word order items with FAs as similar to those with the SVA word order (70%, STDEV = 0.25, ci = 0.03 vs. 61%, STDEV = 0.31, ci = 0.04). There was, however, an interaction between order and adverb (*also + even vs. only*), indicating that, on average, sentences with *only* were rated differently than those with *even* and *also* which interacted with order. Planned pairwise comparisons showed that Italian L2 participants rated *also* and *even* differently ($\beta = 0.49$ (SE=0.18), $z = 2.70$, $p = 0.02$) while *also* compared to *only* was not ($\beta -0.05$ (SE = 0.18), $z = -0.25$, $p = \text{n.s.}$) and *even vs. only* ($\beta = -0.53$ (SE 0.18), $z = -2.95$, $p = 0.009$).

Table 6 Best fit model for Experiment 2 - Italian English L2 learners (log odds)

Fixed Effects	Estimate	SE	z value	95% CI	p-value
Intercept	0.91	0.17	5.26	0.57 to 1.25	<0.001
Order	0.20	0.19	1.06	-0.17 to 0.57	n.s.
Adverb 1 (Also vs. Even)	-0.24	0.09	-2.70	-0.42 to -0.07	<0.01
Adverb 2 (Also + Even vs. Only)	0.10	0.05	1.83	-0.01 to 0.20	=0.07
Order × Adverb 1 (Also vs. Even)	-0.006	0.09	-0.07	-0.18 to 0.17	n.s.
Order × Adverb 2 (Also + Even vs. Only)	-0.16	0.05	-3.00	-0.26 to -0.05	<0.01

Combined Analyses

For the analyses that included participants from both experiments, another factor was added (speaker type). In the combined analysis there was a main effect of word order, as all participants combined rated the SAV word order more grammatical than the SVA order (70%, STDEV = 0.29, ci = 0.06 vs. 52%, STDEV = 0.33, ci = 0.07). There was an effect of adverb type (*also + even* vs. *only*). There was a significant main effect of speaker type, indicating that L2 English learners, on average, give higher ratings than Monolinguals. The results are shown in Table 7.

There was a simple interaction between word order and adverb (*also + even* vs. *only*), as well as a significant simple interaction between order and speaker type. There was a significant interaction between adverb (*also + even* vs. *only*) and speaker type. Finally, there was a three-way interaction between word order, adverb (*also + even* vs. *only*), and speaker type.

Table 7 Best fit model comparing English monolinguals and L2 English learners (log odds)

Fixed Effects	Estimate	SE	z value	95% CI	p-value
Intercept	0.74	0.11	6.33	-0.80 to -0.02	<0.000
Order	0.51	0.18	2.81	0.29 to 1.19	<0.01
Adverb 1 (Also vs. Even)	-0.17	0.07	-2.46	-0.37 to 0.22	<0.05
Adverb 2 (Also + Even vs. Only)	0.24	0.04	5.92	0.03 to 0.30	<0.000

Fixed Effects	Estimate	SE	z value	95% CI	p-value
Speaker Type	0.20	0.11	1.76	0.07 to 0.61	=.08
Order × Adverb 1	-0.20	0.07	-1.51	-0.41 to 0.32	n.s.
Order × Adverb 2	-0.26	0.04	-6.59	-0.51 to -0.19	<0.000
Order × Speaker Type	-0.31	0.17	-1.77	-0.87 to -0.02	=.08
Adverb 1 × Speaker Type	-0.08	0.06	-1.13	-0.36 to 0.14	n.s.
Adverb 2 × Speaker Type	-0.14	0.04	-3.64	-0.29 to -0.07	<0.000
Order × Adverb 1 × Speaker Type	0.10	0.07	1.41	-0.09 to 0.37	n.s.
Order × Adverb 2 × Speaker Type	0.11	0.04	2.68	0.01 to 0.28	<0.01

To better understand the relationship between speaker type and word order preference, Figure 3 plots the proportion of acceptable ratings given for each word order condition, broken down by FA. While English L2 speakers and Monolinguals both rate the SAV word order equally, there is a significant difference between how these groups rate the SVA word order. Interestingly, only two of the FAs in the SVA word order condition are clearly unacceptable for the English monolinguals, *even* and *also*. *Only* in the SVA condition, while slightly less acceptable than its SAV counterparts, is still quite acceptable for this group, an unexpected finding.

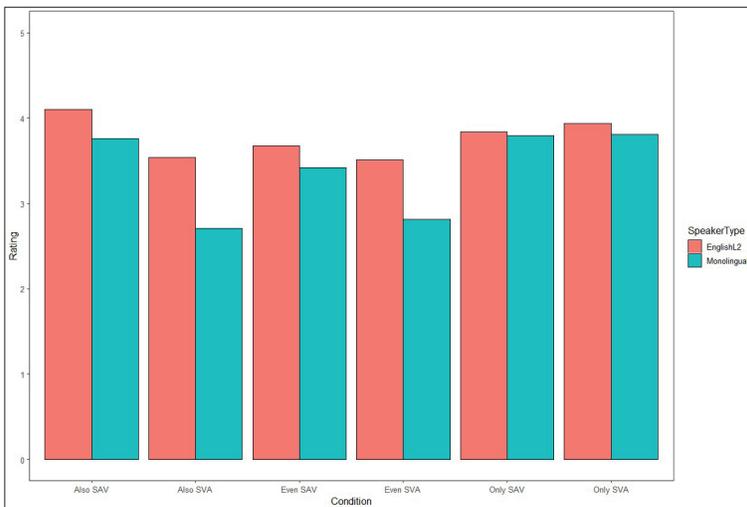


Figure 3 Proportion of Acceptable Responses for each condition (interaction) by speaker type

Further Analyses of Monolinguals

To better understand the driving force behind the overall acceptability of the FA *only* in both pre- and post-verbal positions, we further examined the data. Only English monolinguals were used in the analyses, as well as the FA *only*.

The analyses were again analysed in R using the `lme4` package, with random intercepts for both Subjects and Items, and random slopes for order for both Subjects and Items. One of the nested variables in the sentence conditions was Noun + Determiner type, therefore we used this factor, in addition to order, to predict the logit-transformed likelihood (log odds) of grammatical ratings in the English monolinguals. Education level was also investigated separately. We performed stepwise forward model comparisons using likelihood-ratio tests (ANOVA function in R) to determine the significance of our fixed effects.

The results in Table 8 show that there is no main effect of word order, meaning that participants rated sentences with *only* as grammatical regardless of the word order. There was a significant effect for sentences containing prepositional phrases or no determiner (e.g., *Sarah ate only salad.*), which indicates that these sentences were rated significantly more grammatical than others with other determiner/noun combinations. There was an interaction between order and sentences with a definite article and singular noun, however, showing the opposite; these sentences were rated as less acceptable in

the SVA word order than the SAV. There was a similar marginal effect for the interaction between order and indefinite article and singular noun, indicating that monolinguals rated sentences in the SVA order with indefinite articles and singular nouns less acceptable than in the SAV order.

Table 8 Best fit model for only using Noun and determiner types for Monolinguals (in log odds)

Fixed effects	Estimate	SE	z value	95% CI	p-value
Intercept	0.93	0.42	2.21	0.10 to 1.76	<0.05
Order	0.05	0.44	0.13	-0.80 to 0.91	n.s.
Proper Noun	0.15	0.54	0.28	-0.91 to 1.20	n.s.
Definite Article & Singular Noun	0.85	0.57	1.51	-0.25 to 1.96	n.s.
Indefinite Article & Singular Noun	0.32	0.58	0.54	-0.83 to 1.46	n.s.
Prepositional Phrase or No Article	1.31	0.61	2.15	0.12 to 2.50	<0.05
Some & Plural Noun	-0.25	0.56	-0.45	-1.35 to 0.85	n.s.
Order × Proper Noun	0.05	0.52	0.09	-0.97 to 1.07	n.s.
Order × Definite Article & Singular Noun	-1.34	0.55	-2.54	-2.48 to -0.32	<0.05
Order × Indefinite Article & Singular Noun	-1.00	0.56	-1.78	-2.11 to 0.10	=0.07
Order × Prepositional Phrase or No Article	-0.35	0.59	-0.60	-1.51 to 0.80	n.s.
Order × Some & Plural Noun	-0.69	0.53	-1.29	-1.74 to 0.36	n.s.

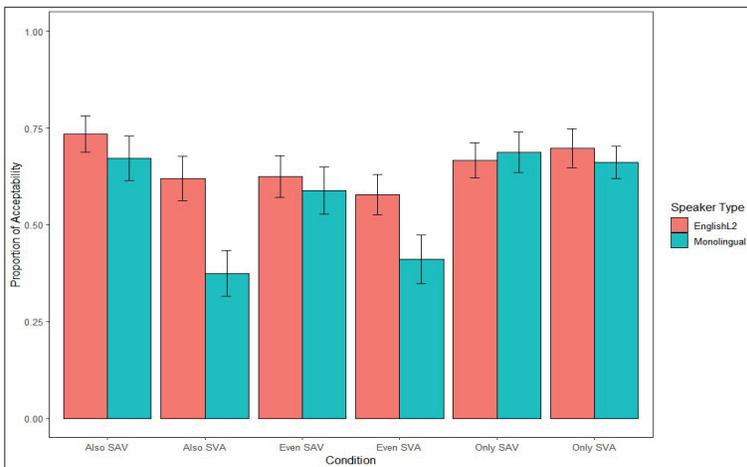


Figure 4 Proportion of acceptable ratings of sentences with only in each word order condition and each determiner and noun type for Monolinguals

Finally, another analysis was done to investigate another potential driving force behind word order acceptability in monolinguals: education level. Two more analyses were conducted. The first included the dataset included the sentences with *only* and added the factor Education level. Table 9 shows the results of this analysis. There showed to be a significant interaction between word order and education in the English monolinguals (SAV College Degree: 78%, STDEV = 0.34, ci = 0.06 vs. SAV No College Degree: 60%, STDEV = 0.35, ci = 0.08; SVA College Degree: 59%, STDEV = 0.25, ci = 0.05 vs. SVA No College Degree: 71%, STDEV = 0.35, ci = 0.08). This demonstrates that overall, people with college degrees rate the SAV word order all together higher and the SVA lower than those with no college degree.

Table 9 Best fit model for Monolinguals and Education level (sentences with only)

Fixed effects	Estimate	SE	z value	95% CI	p-value
Intercept	1.23	0.30	4.07	0.10 to 1.76	<0.000
Order	-0.41	0.32	-1.29	-1.05 to 0.22	n.s.
Education Level (College Degree vs. No College)	0.29	0.25	1.15	-0.20 to 0.78	n.s.
Order × Education Level	-0.60	0.28	-2.11	-1.15 to -0.04	<0.05

The same analysis as shown in Table 9 was also conducted using all the data to understand if this phenomenon was a result of the FA *only*, or if the same pattern persisted using all FAs. Table 10 shows this to be true, even though the main effect of order is weaker, and the interaction of order and education level is marginally significant (SAV College Degree: 76%, STDEV = 0.29, ci = 0.06 vs. SAV No College Degree: 62%, STDEV = 0.34, ci = 0.08; SVA College Degree: 37%, STDEV = 0.27, ci = 0.05 vs. SVA No College Degree: 51%, STDEV = 0.37, ci = 0.08).

Table 10 Best fit model for Monolinguals for all data by Education level

Fixed effects	Estimate	SE	z value	5% CI	p-value
Intercept	0.60	0.14	4.16	0.32 to 0.88	<0.000
Order	0.76	0.28	2.68	0.20 to 1.31	<0.001
Education Level (College Degree vs. No College)	0.01	0.13	0.07	-0.25 to 0.27	n.s.
Order × Education Level	0.45	0.27	1.68	-0.08 to 0.98	=0.09

Figure 6 plots the interaction of word order and education level for monolingual English speakers, which shows an inversion of word order preference depending on participants' level of education. On average, participants with a college degree accept the SVA word order more than those without a degree. On the other hand, those without college degrees rate SVA sentences higher than those with a degree.

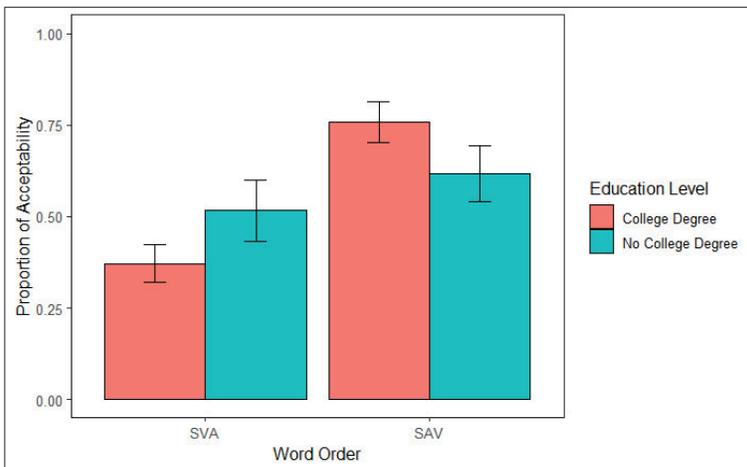


Figure 5 Proportion of Grammatical Ratings for word order preference as a function of education level (English Monolinguals)

3 Discussion and Conclusion

This paper addresses the issue of word order acceptability for FAs in English. Two groups of speakers were examined in the study, and we found that there is a significant difference in the acceptability of word order between groups. On average, monolingual English speakers prefer the SAV word order to the SVA word order during an acceptability judgment task, while the Italian English language learners show that both word orders are, on average, acceptable, despite the fact they are highly proficient English learners. The Italian participants showed slight sensitivity to word order when it interacted with adverbs, rating sentences with *also* and *even* in the SVA word order condition lower than sentences with *only*. This was similar to the results of the monolingual English speakers.

All things considered, the discrepancy in the responses from the English learners in comparison with their English monolingual peers suggests that Focus Adverbs are still troublesome for highly proficient English learners. It is very likely that interference from their L1 may be at fault and that they are unable to fully reject the SVA word order due to the active verb-raising parameter, following the FT/FA hypothesis (Schwartz, Sprouse 1996).

Considering previous studies have used explicit teaching techniques or negative evidence to attempt to reset parameters in the L2 classroom (e.g., Formisano 2013), one potential follow-up to this study includes adapting those experiments to include Focus Adverbs. An-

other possibility includes developing a structural priming experiment (e.g., Bock 1986) to investigate the use of structural priming with adverbs, and more importantly FAs, as a form of implicit learning.

The surprising result in this study is that of the acceptability of SVA *only* among English monolinguals at such high rates. There are two possible explanations for this, although they should be individually and experimentally examined. First, *only* may be under reanalysis as it is highly acceptable when there is no article or when there is a prepositional phrase. In other words, its perceived function may be that of an adjective and not an adverb. One possible way to control for this is to modify the experiment to include audio, therefore forcing a semantic interpretation onto the sentence.

Another possibility is that during acceptability judgement tasks, monolingual readers with higher levels of education are more focused on form and more attuned to grammar than those with lower levels of education, who may have more willingness to rate non-standard or traditionally ungrammatical sentences as acceptable.

In conclusion, Focus Adverbs have been found to be more acceptable in the SAV word order by native speakers and acceptable in both word orders by L2 English learners. This is true even after having reached proficient levels of English. This result suggests that Focus Adverbs can be used as a function of near-native fluency. Further study is needed to find out if errors are committed in production tasks, as well. Efficient methods of increasing L2 learners' accuracy in identifying more nativelike placement for Focus Adverbs also merit further research.

Bibliography

- Alxatib, S. (2020). *Focus, Evaluativity, and Antonymy: A Study in the Semantics of Only and its Interaction with Gradable Antonyms*. Cham, Switzerland: Springer International Publishers. Studies in Linguistics and Philosophy 104.
- Bock, K. (1986). "Syntactic Persistence in Language Production". *Cognitive Psychology*, 18(3), 355-87. [https://doi.org/10.1016/0010-0285\(86\)90004-6](https://doi.org/10.1016/0010-0285(86)90004-6).
- Chomsky, N. (1986). *Barriers*. Cambridge (MA): MIT Press.
- Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. Cambridge: Press Syndicate of the University of Cambridge.
- Emonds, J. (1978). "The Verbal Complex V'-V in French". *Linguistic Inquiry*, 9, 151-75.
- Emonds, J. (1985). *A Unified Theory of Syntactic Categories*. Dordrecht: Foris.
- Firsten, R.; Killian, P. (1994). *Troublesome English: A Teaching Grammar for ESOL Instructors*. New Jersey: Prentice Hall Regents.
- Formisano, Y.M. (2013a). "Verb Movement as a Teaching Tool". *Lingue Linguaggi*, 10, 33-46.

- Formisano, Y.M. (2013b). "Teaching Adverb Position to Italian Students of English as L2: Verb Movement as a Teaching Tool". *STiL - Studies in Linguistics*, 5, 42-61.
- Hamman, C. (2000). "Parameters and (L2) Acquisition: Verb-Raising". *GG@G (Generative Grammar in Geneva)*, 1, 275-91.
- König, E. (1991). *The Meaning of Focus Particles: A Comparative Perspective*. London: Routledge.
- Pollock, J.Y. (1989). "Verb Movement, Universal Grammar and the Structure of IP". *In Linguistic Inquiry*, 20, 365-424.
- Rooth, M. (1992). "A Theory of Focus Interpretation". *Natural Language Semantics*, 1, 75-116.
- Schwartz, B.; Sprouse, R. (1996). "L2 Cognitive States and the Full Transfer/Full Access Model". *Second Language Research*, 12, 40-72. <https://doi.org/10.1177%2F026765839601200103>.
- Stringer, D. (2013). "Modifying the Teaching of Modifiers: A Lesson from Universal Grammar". Whang, M. et al. (eds), *Universal Grammar and the Second Language Classroom*. Dordrecht: Springer Science; Business Media, 77-100. *Educational Linguistics* 16.
- Solís Hernández, M. (2006). "The Position of Adverbs in English: Trying to Solve a Major Problem Most Language Learners Usually Face". *Filología y Lingüística*, 32(1), 271-85. <https://doi.org/10.15517/rfl.v32i1.4332>.
- White, L. (1989). *Universal Grammar and Second Language Acquisition*. Amsterdam: John Benjamins.
- White, L. (1990). "The Verb-Movement Parameter in Second Language Acquisition". *Language Acquisition*, 1(4), 337-60. https://doi.org/10.1207/s15327817la0104_2.
- White, L. (1991). "Adverb Placement in Second Language Acquisition: Some Effects of Positive and Negative Evidence in the Classroom". *Second Language Research*, 7, 133-61. <https://doi.org/10.1177%2F026765839100700205>.
- White, L. (2003). *Second Language Acquisition and Universal Grammar*. Cambridge: Cambridge University Press.